



# भारत का राजपत्र The Gazette of India

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नई दिल्ली, शनिवार, जुलाई 21, 1973 (आषाढ़ 30, 1895)

No. 29]

NEW DELHI, SATURDAY, JULY 21, 1973 (ASADHA 30, 1895)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके  
(Separate paging is given to this Part in order that it may be filed as a separate compilation)

## भाग III—खण्ड 2 PART III—SECTION 2

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस  
Notifications and Notices issued by the Patent Office relating to Patents and Designs

### THE PATENT OFFICE

#### PATENTS AND DESIGNS

*Calcutta, the 21st July 1973*

The date, shown in crescent brackets are the dates claimed under Section 135 of the Act.

#### APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE

*30th June 1973*

1528/Cal/73. Ntn Toyo Bearing Company Ltd. and Z. Tsukumo Bobbin hanger.

1529/Cal/73. T. Kobayashi. Method and apparatus for automatic angling on fishing vessels.

1530/Cal/73. Dunlop Holdings Limited. A method for treating a deflated tyre. (20th June 1970). [Divisional date 16th June 1971].

1531/Cal/73. Vereinigte Österreichische Eisen- und Stahlwerke—Alpine Montan Aktiengesellschaft. Improvements in or relating to a method of purifying a stream of mechanically comminuted material and apparatus for carrying out the method.

1532/Cal/73. Combustion Engineering, Inc. Centrifugal casting using tapered refractory lining.

1533/Cal/73. Chinoin Gyógyszer És Vegyeszeti Termékek Gyára Rt., Amino-imidazo and amino-pyrazoloisouquinolines and process for the preparation thereof.

*2nd July 1973*

1534/Cal/73. Rca Corporation. Heat dissipation for power integrated circuit devices.

1535/Cal/73. Unie Van Kunstmestfabrieken B. V. Process for preparing urea

1536/Cal/73. Unie Van Kunstmestfabrieken B. V. Process for preparing urea.

1537/Cal/73. Unie Van Kunstmestfabrieken B. V. Process for the preparation of an additive for maize silage on the basis of prilled urea.

1538/Cal/73. The Commonwealth of Puerto Rico. Method of preparing a cattle feed ingredient from sugar-cane bagasse.

1539/Cal/73. Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius & Bruning. Process for preparing copolymers of trioxane and moulding compositions thereof.

1540/Cal/73. Mitsui Pharmaceuticals, Incorporated. Process for the preparation of tuberculin active proteins and peptides.

1541/Cal/73. G. Singh. A technique whereby refrigeration air-conditioning is achieved by using normal centrifugal pumps, meant for liquids.

*3rd July 1973*

1542/Cal/73. Council of Scientific and Industrial Research. Gravimetric sampler for the respirable dust.

1543/Cal/73. Pioneer Oilsealing & Moulding Company Limited. Improvements in and relating to face seals. (5th July 1972).

1544/Cal/73. Girling Limited Hydraulic braking system. (7th July 1972).

1545/Cal/73. Cutler-Hammer World Trade, Inc. Defrost sensor, control circuit and method therefor.

1546/Cal/73. Rockwell International Corporation Anti-friction ball bearing assembly.

1547/Cal/73. The Singer Company. Looper for patterned cut pile tufting machine. [Divisional date 13th January 1972].

1548/Cal/73. James Mackie & Sons Limited. Improvements relating to textile machines. (3rd July 1972).

1549/Cal/73. Karl Kroyer St. Anne's Limited. Production of fibrous sheet material. (8th July 1972).

- 1550/Cal/73. Ajinomoto Company, Inc. and Japan Carboxylic Acids Company Limited. Process for separating unsaponifiable matter.
- 1551/Cal/73. General Electric Company. Stabilized ester impregnant.
- 1552/Cal/73. Norton Company. Granular magnesia useful as electrical insulator.
- 1553/Cal/73. Chinoi Gyogyszer- Es Vegyeszeti Termek Gyara Rt. Process for the preparation of basic esters and salts thereof.
- 1554/Cal/73. Punjab Industries. Reinforcing bar for concrete.

4th July 1973

- 1555/Cal/73. Burman & Sons Limited. Vehicle steering gear. (7th July 1972).
- 1556/Cal/73. British Industrial Plastics Limited. Improvements in or relating to the moulding of thermosetting materials. (7th July 1972).
- 1557/Cal/73. Hamilton Kent Manufacturing Co., Elastomeric seal for pipes.
- 1558/Cal/73. Tractel S. A. Improvements in or relating to cable traction and hoisting apparatus.
- 1559/Cal/73. Apaw S. A. Continuous ice cream machine.
- 1560/Cal/73. Pal-Magneton Narodni Podnik and Nauchno-Issledovatel'skyi Eksperimentalnyi Institut Avtomobilnogo Elektrooborudovaniia i Avtopriborov, "Nilavtopriborov". System for regulating voltage of AC generator.
- 1561/Cal/73. Emhart Corporation. Method and means for automatically regulating weight of articles in glassware forming machine.
- 1562/Cal/73. General Electric Company. Abrasive bodies of finely-divided cubic boron nitride crystals.
- 1563/Cal/73. Ceskoslovenska Akademie Ved, Equipment for fluidizing powders.

5th July 1973

- 1564/Cal/73. Dunlop Limited. Improvements in and relating to vehicle wheels. (6th July 1972).
- 1565/Cal/73. Rohm and Haas Company. Anion exchange resins.
- 1566/Cal/73. Delalande S. A. Novel-1 (2'-benzoyl eth-1'-2-(4'-cinnamyl piperazin-1''-yl methyl) benzimidazoles their process of preparation and their therapeutic application.
- 1567/Cal/73. Spindel. Motoren-und Maschin-fabrik A. G. Textile spindle.
- 1568/Cal/73. Comalco (J. & S.) Pty. Limited. Means and method of slotting strip metal. (17th July 1972).
- 1569/Cal/73. Bunker Ramo Corporation. One-piece environmental removable contact connector.
- 1570/Cal/73. Wavin B. V. Method and device for manufacturing plastic bags in a continuous way. (7th March 1973).

6th July 1973

- 1571/Cal/73. Council of Scientific and Industrial Research. A process for the manufacture of ceramic bimorph.
- 1572/Cal/73. American Flange & Manufacturing Co., Inc. Container closure construction. [Divisional date 4th October 1971].
- 1573/Cal/73. Simon-Carves Limited. Improvements in or relating to the manufacture of sulphuric acid. (12th July 1972).
- 1574/Cal/73. Uniroyal, Inc. Steel-belted radial ply tires with 0° textile cap band.

- 1575/Cal/73. Pfizer Inc. Process for preparing 15-substituted-10-pentanoic prostaglandins.
- 1576/Cal/73. Orenstein & Koppel Aktiengesellschaft. Hydraulic operating system for a bucket-wheel excavator.
- 1577/Cal/73. The Metal Box Company of India Limited. Improvements in or relating to containers.
- 1578/Cal/73. S. A. Platt. Sound reproduction apparatus.
- 1579/Cal/73. Farbwerke Hoechst Aktiengesellschaft vormals Meister Lucius & Bruning. Process for preparing copolymers of trioxane and moulding compositions thereof.
- 1580/Cal/73. A. Gruvstad. Method and means of producing facing or outer layers in the surface of concrete bodies.
- 1581/Cal/73. Carding Specialists (Canada) Limited. Apparatus for use as a gas compressor or gas blower. (7th July 1972).

#### Application for Patents filed at Patent Office (Bombay Branch)

25th June 1973

- 215/Bom/73. H. T. Parmar. Kerosene gas operated hot-plate.
- 215/Bom/73. N. B. Joshi and N. B. Vagheshana. An attachment for clocks to indicate choghadia along-with days.

26th June 1973

- 216/Bom/73. S. R. Kumar. A domestic gas measuring (meter) unit.

27th June 1973

- 217/Bom/73. A. R. Yadav. A novel gear box.
- 218/Bom/73. Tata Engineering & Locomotive Company Limited. A complete housing for a rear axle beam assembly and a method of manufacturing the same.

#### Application for Patents filed at Patent Office (Madras Branch)

26th June 1973

- 89/Mas/73. C. S. Rao. Improvements in or relating to incandescent lights of gas mantle type.
- 90/Mas/73. C. S. Rao. Improvements in or relating to candescent lights of gas mantle type.

30th June 1973

- 91/Mas/73. G. D. Buell. The manufacture of disposable containers with the built in ripping or opening device and used for packing, marketing, storing, containing or transporting sealed there in any products, substance or thing. (12th October 1972).
- 92/Mas/73. G. D. Buell. The manufacture of disposable containers for the purpose of sealing and storing or transporting or marketing fluids incorporating and arrangement such as a siphon so constructed into the containers as to facilitate the easy apprehension and extension of the siphon arrangement for the purpose of the easy drinking of the fluid contents. (5th July 1972).

- 93/Mas/73. G. D. Buell. The manufacture of disposable containers made of a flexible substance for the purpose of packing, marketing, storing containing or transporting sealed therein any produce substance or thing to the built in piercing device. (12th October 1972).

2nd July 1973

- 94/Mas/73. S. V. Pandit. Playing tennis, viz. tubular metal tennis racquet.
- 95/Mas/73. S. C. Krishna. Tuning internal combustion engines, viz., automobile timing light.

- 96/Mas/73. The K. C. P. Limited. A clarifying apparatus for use for the clarification of sugar cane juice and other liquids.
- 97/Mas/73. M. A. Partha Sarathy. A top-cover for individual operating riders of bicycles, scooters and motor-cycles.
- 98/Mas/73. T. P. N. Prasad. An automatic self releasing hook.

3rd July 1973

- 99/Mas/73. S. Balachandran. Improved water tap.
- 100/Mas/73. C. Varughese (Sn.). Compos (Concentric multipurpose pin pointer organisation or compos for short.)

## ALTERATION OF DATE

104059. Ante-dated to 1st May 1964.
104060. Ante-dated to 1st May 1964.
105120. Ante-date to 16th August 1962.
- 135395 (450/Cal/73). Ante-dated to 1st August 1969.
- 135396 (451/Cal/73). Ante-dated to 1st August 1969.
130975. The claim to Convention date 23rd April 1970 has been abandoned and the application dated as of 14th April 1971, the date of filing in India.

## COMPLETE SPECIFICATIONS ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The written statement of opposition should be filed along with the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2 (postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office.

CLASS 32-F-1, 32-F-2b. 82373

PROCESS FOR THE PRODUCTION OF A 2-OXO-3-(N, N-DISUBSTITUTED CARBOXAMIDO)1, 2, 3, 4, 6, 7-HEXAHYDRO-11 b-H-BENZOPYRIDOLINE.

PFIZER CORPORATION, CALLE 15j AVENIDA SANTA ISABEL, COLON, PANAMA.

Application No. 82373 filed May 22, 1962.

## 8 Claims.

A process for the production of a 2-oxo-3-(in, n-disubstituted carboxamido)-1, 2, 3, 4, 6, 7-hexahydro-11b-H-benzopyridocoline wherein the substituted carboxamido moiety is N, N-di(lower alkyl)-carboxamido, N-(lower alkyl)-N-(p-tolyl) carboxamido or N-(lower alkyl)-N-phenylcarboxamido which comprises contacting a 3, 4-dihydroisoquinoline acid addition salt in a reaction inert polar organic solvent with at least a molar equivalent of a correspondingly N, N-disubstituted acetacetamide compound in the presence of an equivalent amount in moles of formaldehyde at a temperature that is in the range of from about 20°C. up to about 100°C. for a period of about one to about twenty-four hours.

CLASS 32-F-1, 32-F-2a, 32-F-2b.

83742

A PROCESS FOR THE PREPARATION OF N-ALKYL-AMINO ALKYL-BENZYLAMINES.

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, OLD MILL ROAD, NEW DELHI-I, INDIA.  
Application No. 83742 filed August 16, 1962.

## 1 Claim.

A process for the preparation of N-alkylaminoalkyl-benzylamines represented by the general formula (I) of the accompanying drawings wherein

R<sub>1</sub>, R<sub>2</sub>—denote H, chloro, dichloro in 2 : 4, 2 : 5, 3 : 4 positions or any other halogen, alkyl, alkoxy or alkyltendioxy radicals containing from 1 to 6 carbon atoms;

R<sub>3</sub>, X—denote H, or alkyl groups having 1 to 6 carbon atoms;

C—stands for an aliphatic branched or straight chain containing 2 to 6 carbon atoms or may represent a methylene group also;

and Y—stands for dialkylamino groups having from 1 to 6 carbon atoms or a heterocyclic residue such as morpholine, piperidine, α, β or γ—pipercolines, 1, 2, 3, 4-tetrahydroquinoline or isoquinoline with or without alkyl or alkoxy groups carrying not more than 3 carbon atoms.

the said process comprising the reduction of a suitably substituted compound of the general formula (II) of the drawings (wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, X, C and Y have the same meanings as described above) with complex metal hydrides such as lithium aluminium hydride using suitable solvents such as tetrahydrofuran, benzene or ether.

CLASS 32-F-1, 32-F-2b.

84235

PROCESS FOR PRODUCING AZAPHENTHAZINES.

DEUTSCHE GOLD-UND SILBER-SCHNEIDANSTALT VORMALS ROSSLER, OF 9, WEISSFRAUENSTRASSE, FRANKFURT (MAIN), FEDERAL REPUBLIC OF GERMANY.

Application No. 84235 filed September 20, 1962.

## 6 Claims

A process for the production of azaphenthiazines, substituted in the pyridine ring, of the general formula as shown in Fig. 3 in which a thioether of the general formula as shown in Fig. 4 in which R<sup>1</sup> represents hydrogen or a basically substituted, alkyl group, R<sup>2</sup> represents a halogen, an alkyl group, the trifluoromethyl group, the nitrile group, the carboxyl group, a low aliphatic acyl group, containing 1 to 5 carbon atoms, an alkylthio group, an alkylsulphonyl group or a dialkylsulphonamido group, either A or B represents an amino group, which is if desired substituted by the radical R<sup>1</sup>, and the other represents the same radical or a hydroxy-group is heated in the presence of an agent that will split off water or ammonia.

CLASS 32-F-1.

102158

PROCESS FOR THE PURIFICATION OF IMPURE HALOTHANE.

IMPERIAL CHEMICAL INDUSTRIES LIMITED, OF IMPERIAL CHEMICAL HOUSE, MILLBANK, LONDON, S.W. 1, ENGLAND.

Application No. 102158 filed October 19, 1965.

Convention date October 28, 1964 (43979/64) U.K.

## 8 Claims—No drawings.

A process for the purification of impure halothane containing as impurity one or more of the compounds of the formula :—CF<sub>3</sub>CX=CYCF<sub>3</sub> wherein X stands for hydrogen, bromine or chlorine and Y stands for bromine or chlorine which comprises intimately contacting said impure halothane in the liquid phase with aluminium chloride, aluminium

bromide or antimony pentachloride and recovering the purified halothane.

CLASS 32-F<sub>1</sub>, 32-F<sub>2</sub>(b). 104059

PROCESS FOR THE PRODUCTION OF 4-AND-5-ARYL-1-NAPHTHALENE ACETIC ACIDS.

PARKE DAVIS & COMPANY, AT JOSEPH CAMPAU AVENUE AT THE RIVER, DETROIT, MICHIGAN, UNITED STATES OF AMERICA.

Application No. 104059 filed February 25, 1966.

Division of Application No. 93569, filed May 1, 1964.

4 Claims.

Process for the production of compounds of the formula I of the accompanying drawings wherein R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> have the meaning given below, characterized in that a 4- or 5-aryl-1-alkylnaphthalene reactive metal derivative which can be represented by the formula II of the drawings, is reacted with carbon dioxide in an anhydrous medium, followed by acidifying the product obtained where W is a reactive metal substituent; R<sup>2</sup> is hydrogen or methyl; one of R<sup>3</sup> and R<sup>4</sup> is hydrogen; and the other of R<sup>3</sup> and R<sup>4</sup> represents a group of formula III of the drawings where Z is—hydrogen fluorine, chlorine, bromine, *o*-methyl, *m*-methyl, *o*-methoxy, or *m*-methoxy.

CLASS 32-F<sub>1</sub>, 32-F<sub>2</sub>(a), 32-F<sub>4</sub>(a). 104060

PROCESS FOR THE PRODUCTION OF ESTERS OF 4-AND 5-ARYL-1 NAPHTHALENEACETIC ACIDS.

PARKE, DAVIS & COMPANY, AT JOSEPH CAMPAU AVENUE AT THE RIVER, DETROIT, MICHIGAN, UNITED STATES OF AMERICA.

Application No. 104060 filed February 25, 1966.

Division of Application No. 93569 filed May 1, 1964.

1 Claim.

Process for the production of compounds of the formula I of the accompanying drawings wherein R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>1</sup> have the meanings given below characterized in that a compound of the formula II of the drawing or a reactive derivative thereof is reacted with a lower alkanol or a lower dialkylaminoalkanol or a reactive derivative thereof; where R<sup>1</sup> is a lower alkyl radical or a lower, dialkylaminoalkyl radical; R<sup>2</sup> is hydrogen or methyl; one of R<sup>3</sup> and R<sup>4</sup> is hydrogen; and the other of R<sup>3</sup> and R<sup>4</sup> represents a group of formula IV of the drawing where Z is—hydrogen, fluorine, chlorine, bromine, *o*-methyl, *m*-methyl, *o*-methoxy, or *m*-methoxy.

CLASS 32-F-1, 32-F-2a, 32-F-2b. 105120

A PROCESS FOR THE PREPARATION OF N-ALKYL-AMINO ALKYL BENZYLAMINES.

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, OLD MILL ROAD, NEW DELHI-1, INDIA.

Application No. 105120 filed May 4, 1968.

Division of Application No. 83742, filed August 16, 1962.

4 Claims.

A process for the preparation of N-alkylaminoalkylbenzylamines represented by the general formula (I) of the accompanying drawings wherein

R<sub>1</sub>, R<sub>2</sub>—denote H, chloro, dichloro in 2 : 4, 2 : 5, 3 : 4 positions, or any other halogen, alkyl, alkoxy or alkylene-dioxy radicals containing from 1 to 6 carbon atoms.

R<sub>3</sub>, X—denote H, or alkyl groups having 1 to 6 carbon atoms.

C—stands for an aliphatic branched or straight chain containing 2 to 6 carbon atoms or may represent a methylene group also.

and Y—stands for dialkylamino groups having from 1 to 6 carbon atoms, or heterocyclic residue such as morpholine, piperidine α—β—γ—pipercolines, 1, 2, 3, 4-tetrahydroquinoline or isoquinoline with or without alkyl or alkoxy groups carrying not more than 3 carbon atoms. the said process comprises the condensation of a suitably substituted compound of the general formula (II) of the drawings (wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and X have the same meaning as described above) with a compound belonging to the general

formula (III) of the accompanying drawings wherein Y and C have the same meaning as described above at suitable temperatures ranging from 70-150°C for a suitable length of time ranging from 1 to 8 hours.

CLASS 32-F-2b, 32-F-2c. 114911

PROCESS FOR PREPARING OPTICALLY ACTIVE METHIONINE AMIDE OR A COMPOUND THEREOF. STAMICARBON N. V. OF VAN DER MAESENSTRAAT 2. HEERLEN, THE NETHERLANDS.

Application No. 114911 filed March 11, 1968.

8 Claims—No drawings.

A process for preparing optically active methionine amide or a compound thereof, comprising converting a mixture of L- and D-methionine amide by a method as herein described, at least in part, into the salt of methionine amide and optically active 2-pyrrolidone-5-carboxylic acid, contacting the resulting product with a liquid medium to form a solid phase, consisting mainly of one of the diastereo-isomers of the said salt, by the side of a liquid phase, and separating the solid phase from the liquid phase.

CLASS 32-F-1. 115467.

PROCESS FOR PREPARING DERIVATIVES OF α—FLUORO-MALONIC ACIDS.

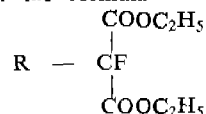
LEPETIT S. P. A.—GRUPPO PER LA RICERCA SCIENTIFICA E LA PRODUZIONE CHIMICA FARMACEUTICA, OF 8, VIA ROBERTO LEPETIT, MILAN, ITALY.

Application No. 115467 filed April 16, 1968.

Convention date May 12, 1967 (No. 22258/67) U.K.

3 Claims.

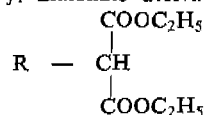
A process for preparing a derivative of the α—fluoro-malonic acid of the formula



wherein R is a member of the class consisting of aryl and dibenzo-furanyl, comprising heating a compound of the formula



wherein R has the above significance with 1 to 1.5 equimolecular amounts of sodium ethoxide and an at least equimolecular amount of a compound of the class consisting of diethyl carbonate and diethyl oxalate, optionally in the presence of an anhydrous solvent such as herein described and reacting the obtained diethyl malonate derivative of the formula



wherein R has the above significance with an amount at least equimolecular of perchloryl fluoride in the presence of sodium hydride in an inert organic solvent.

CLASS 32-F-2(a), 32-F-2(b) and 55E4. 122581

PROCESS FOR PREPARING 4-DESOXY RIFAMYCIN SV AND DERIVATIVE THEREOF.

GRUPPO LEPETIT S.p.A. OF VIA ROBERTO LEPETIT 8, MILAN, ITALY.

Application No. 122581 filed August 1, 1969.

1 Claim

A process for preparing 4-desoxyrifamycin SV of the formula shown in Fig. 1 of the accompanying drawings which comprises treating 4-desoxy-4-diazorifamycin S of the formula shown in Fig. 2 of the drawings dissolved in an organic solvent, at a temperature not higher than room temperature, with a mild reducing agent, such as alkali metal bisulfites, formaldehyde, hydrosulfites and sulfites, lithium aluminium hydride and sodium borohydride.

CLASS 32-F<sub>1</sub>, 32-F<sub>2</sub>(b).

124860.

## PROCESS FOR THE PREPARATION OF QUINAZOLINONE DERIVATIVES.

KARAMCHAND PREMCHAND PRIVATE LIMITED,  
OF POST BOX 28, AHMEDABAD GUJARAT STATE,  
INDIA.

Application No. 124860 filed January 15, 1970.

## 6 Claims.

A process for the preparation of the quinazolinone derivatives of the general formula as shown in Fig. 1 of the accompanying drawings wherein R is alkyl having 1-5 carbon atoms—either branched or straight chain and X is H, halogen, nitro or amino in any of the positions 5, 6, 7 or 8 of the quinazolinone ring and their acid addition salts, which comprises reacting 3, 1-benzoxazin-4-one of the general formula as shown in Fig. 2 wherein R is alkyl having 1-5 carbon atoms—either branched or straight chain—and X is H, halogen or nitro with 2-amino-3-methylpyridine with or without a solvent and in presence or absence of phosphorustrichloride or phosphorusoxychloride and reducing by known methods the corresponding nitroquinazolinone obtained when X is desired to be amino and when ever desired the acid addition salts of quinazolinones of Fig. 1 wherein R and X are as defined earlier for Fig. 1 are obtained by reacting the quinazolinones of Fig. 1 with desired acid.

CLASS 32-F-1.

125986

## PROCESS FOR PREPARING NOVEL P-(TRIHALO-METHYLQUINOLYLAMINO) BENZAMIDES

THE UPJOHN COMPANY, OF 301 HENRIETTA  
STREET, KALAMAZOO, MICHIGAN, UNITED STATES  
OF AMERICA.

Application No. 125986 filed March 30, 1970.

## 3 Claims.

Process of preparing a compound having the formula I shown in the accompanying drawings, wherein X is halogen; R<sub>1</sub> is hydrogen or alkyl having 1 to 4 carbon atoms, inclusive; R<sub>2</sub> is hydrogen or alkyl having 1 to 4 carbon atoms, inclusive; and R<sub>3</sub> and R<sub>4</sub>, when taken together with -N= is selected from the group consisting of unsubstituted and mono-alkyl and polyalkyl substituted pyrrolidino, piperidino, hexamethyleneimino, morpholino, piperazino, and 4-benzyl-piperazino and R<sub>5</sub> is hydrogen or alkyl having 1 to 4 carbon atoms inclusive which comprises reacting in the presence of a lower alkanol and an equimolar amount of hydrochloric acid, equimolar amounts of a compound having the formula II shown in the drawings, wherein X is halogen and a compound having formula III shown in the drawings, wherein R<sub>1</sub> and R<sub>2</sub> are as defined above, to produce the compound of formula IA shown in the drawings, wherein R<sub>3</sub>, R<sub>4</sub>, and X may be as defined above and if desired reacting in an inert reaction medium, the compound of formula IA with an alkyl halide and alkali metal hydride or alkali metal amide to produce the compound of formula I.

CLASS 32-F-2(b).

126056

## PROCESS FOR PRODUCING 6-AMINOACYLAMIDOPENICILLANIC ACIDS.

PRESIDENT OF OSAKA UNIVERSITY, OF 36, JOAN-  
CHO, KITA-KU, OSAKA, JAPAN.

Application No. 126056 filed April 3, 1970.

## 5 Claims.

A process for producing 6-aminoacylamidopenicillanic acids having the formula I shown in the accompanying drawings, wherein H<sub>2</sub>N-R-CO- is an amino acid residue [wherein R is an alkylene group or a group shown in Fig. 4 of the drawings, (in which R<sub>1</sub> is a hydrogen atom, methyl or methylthioalkyl group and R<sub>2</sub> is an alkyl, methylthioethyl, phenyl, nitrophenyl aminophenyl, alkoxyphenyl, alkylphenyl, halogenophenyl, hydroxyphenyl, thienyl, methylthienyl, pyridyl, imidazolyl, thiazolyl, pyrazolyl, pyrazolonyl, isooxazolyl, isothiazolyl, pyrrolyl, furyl, tetrahydropyrrolyl, tetrahydrothienyl,

sydonyl, cyclopentyl or cyclohexyl group] or salts thereof, which comprises reacting a 6-amino-penicillanic acid or a derivative thereof with an N-protected amino acid having the formula III shown in Fig. 2 of the drawings, wherein  $\text{N-R-COOH}$  is an amino acid residue, in which R is as defined above, R<sub>1</sub> is a lower alkyl group having 1 to 3 carbon atoms, R<sub>2</sub> is a hydrogen atom or a lower alkyl group having 1 to 3 carbon atoms, including the case where R<sub>1</sub> and R<sub>2</sub> jointly form a cyclopentyl ring or a cyclohexyl ring, and R<sub>3</sub> and R<sub>4</sub>, each is a lower alkyl group having 1 to 3 carbon atoms, including the case where R<sub>3</sub>, R<sub>4</sub>, and an oxygen atom jointly form a morpholine ring, or with a functional acid derivative of said N-protected amino acid, at a temperature ranging from 0°C to -30°C in the presence of an anhydrous inert solvent to form an N-protected 6-aminoacylamidopenicillanic acid having the formula II shown in the drawings, wherein R, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> each means the same as defined above, and hydrolyzing said N-protected 6-aminoacylamidopenicillanic acid or a salt thereof with an acid, at a pH 5.0 or less, at room temperature or below.

CLASS 32-F-2b.

127120

## PROCESS FOR THE PRODUCTION OF NEW BASICALLY SUBSTITUTED 2, 4-(1H, 3H)-QUINAZOLINDIONE DERIVATIVES.

CASSELLA FARBWERKE MAINKUR AKTIENGESSELL-  
SCHAFT OF 6 FRANKFURT (MAIN)- FECHENHEIM,  
WEST GERMANY.

Application No. 127120 filed June 16, 1970.

## 1 Claim.

Process for the production of basically substituted 2, 4-(1H, 3H)-quinazolinedione derivatives of the general formula I shown in the accompanying drawings, wherein R<sup>1</sup> means the radical of a secondary aliphatic, cycloaliphatic, araliphatic amine having 2 to 10 carbon atoms or of a 5, 6 or 7-membered heterocyclic nitrogen base, which contains in the nucleus besides the nitrogen atom a corresponding number of methylene groups as well as optionally, a further nitrogen atom, an O or an S atom, said radical being bound via a nitrogen atom, R<sub>1</sub> stands for lower alkoxy groups having 1 to 4 carbon atoms which are preferably in the 6, 7 or 6, 7, 8-position, R<sub>2</sub> represents alkoxy having 1 to 4 carbon atoms, m stands for the integers 1, 2 or 3 and n means, the integers 2 or 3, characterized by acylating, optionally in the presence of an acid-binding agent, 2, 4-(1H, 3H)-quinazolinediones of the general formula II shown in the drawings, wherein R<sub>1</sub> has the above-given meaning, R is identical with R<sup>1</sup> or, in case R<sup>1</sup> contains an acyloxy radical of the general formula III shown in the drawings, said R may also represent the radical of the underlying hydroxy compound with an alkoxy benzoic acid of the general formula IV shown in the drawings or a functional derivative thereof.

CLASS 127-I, 190-D.

130313

## GRAVITY &amp; AIR COMPRESSOR ENGINE.

PRAKASH NATH GUPTA, VILLAGE DAYALPUR  
ALIAS BHIKHAMPUR, P.O. AURAIYA, DISTRICT  
ETAWAH, (U.P.) INDIA.

Application No. 130313 filed February 18, 1971.

## 7 Claims.

A gravity and air compressor engine comprising a rotating shaft having mounted thereon a drum, a compressor wheel mounted on the same shaft and enclosed within said drum, on one end of the said shaft being mounted a centrifugal governor while on the other end of the shaft being provided with a handle to rotate the shaft manually a pulley mounted on the shaft near to the handle which pulley being connected by means of a belt to another pulley fitted to the shaft of a motor for starting the gravity and air compressor engine if an when so required, another pulley mounted on the said shaft on the side of the drum opposite the said governor, said pulley being connected by means of a belt to another pulley fitted on the shaft of an another engine to which power is transmitted for its driving.

CLASS 141B,

130561

## IMPROVED PROCESS FOR BENEFICIATION OF TITANIFEROUS ORES.

WENDELL E. DUNN, INC. OF 112, KING STREET, WILMINGTON, DELAWARE, UNITED STATES OF AMERICA.

Application No. 130561 filed March 16, 1971.

13 Claims.

A process for beneficiating titaniferous ores containing  $TiO_2$  and iron oxide which comprises contacting a bed of the ore having a static depth in the range of .1 to 5 feet in a gas solids reactor at a temperature in the range of 700 to 1090°C. with at least one carbon monoxide-chlorine cycle comprising passing carbon monoxide through the ore bed for 5-30 minutes, and then passing chlorine through the ore bed for 5-30 minutes while withdrawing vaporized iron chlorides and other vaporized metal chlorides from the said reactor during the operation of the said cycle.

CLASS 172-D-6.

130910

## THREE ROLLER PAIR DRAFTING SYSTEM FOR RING SPINNING FRAMES.

INDUSTRIEWERK SCHAEFFLER INA-NADELLAGER, OF 8522 HERZOGENAURACH, FEDERAL REPUBLIC OF GERMANY.

Application No. 130910 filed April 8, 1971.

3 Claims.

Three roller-pair drafting system for ring spinning frames, in which the material to be spun first passes through a break draft zone between a pair of feed rollers and a pair of apron rollers and then through a main draft zone between the apron roller pair and the delivery roller pair, characterized in that the axes of the top rollers lie approximately in one plane, and the bottom feed roller is offset upwardly out of the plane passing through the axes of the bottom apron roller and bottom delivery roller, by at least half its diameter relative to the top feed roller in a direction towards the apron roller pair so that the material to be spun is partly looped around the bottom feed roller whereby the total length of path of the material between the nips of the feed roller pair and the apron roller pair is longer than the spinning staple length, and the unguided length of path of the material between the point where the material leaves the bottom roller of the feed roller and the nip of the apron rollers is equal to or less than the spinning staple length.

CLASS 172-D-6.

130913

## A WEIGHTING ARM FOR TOP ROLLERS OF DRAFTING SYSTEM FOR SPINNING MACHINES

INDUSTRIEWERK SCHAEFFLER INA-NADELLAGER, OF 8522 HARZOGENAURACH, FEDERAL REPUBLIC OF GERMANY.

Application No. 130913 filed April 8, 1971.

3 Claims.

Weighting arm for top roller of drafting systems in spinning frames which is provided on a supporting element fixed on a hollow supporting bar and which is operated by a loading element characterised in that in the supporting element there is arranged a spring loaded bolt which acts on one end of a fulcrumed lever, the other end of which lever is adapted to act on one end of a second fulcrumed lever which in turn acts on a pin through which the force is applied to the weighted arm.

CLASS 32-F-2a, 55-E-4.

130975

## PROCESS OF PREPARING 4-ALKYL-DIPHENYLMETHOXY-ALKYLAMINES

PFIZER CORPORATION, OF CALLE 153, AVENIDA SANTA ISABEL, COLON, REPUBLIC OF PANAMA.

Application No. 130975 filed April 14, 1971.

2 Claims

A process for preparing a compound of the formula I of the accompanying drawings where  $R^1$  is an alkyl group con-

taining from 3 to 5 carbon atoms;  $R^2$  and  $R^3$  are each an alkyl group containing from 1 to 4 carbon atoms, or together with the nitrogen atom to which they are attached form a saturated heterocyclic group containing at least 4 carbon atoms in the ring; 'Alk' is a divalent saturated aliphatic hydrocarbon group containing from 2 to 4 carbon atoms, in which the free valences are located on different carbon atoms; and the total number of carbon atoms in  $R^2$ ,  $R^3$  and 'Alk' is at least 5, characterized by reacting a substituted benzhydrol of the formula II A of the drawings with an alkali metal compound in an inert solvent at reflux temperatures to form the alkali metal alkoxide and then with an aminoalkyl halide of the formula:  $hal-alk-NR^2R^3$  where 'hal' represents a halogen atom, and, if desired, preparing the pharmaceutically acceptable salts thereof by methods such as herein described.

CLASS 98-G

131057

## IMPROVEMENT IN OR RELATING TO A RADIANT HEATING PLATEN FOR FREEZE DRYING PLANTS OR OTHER DRIERS USING RADIANT HEATING.

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJI MARG, NEW DELHI-1, INDIA.

Application No. 131057 filed April 21, 1971.

3 Claims

A radiant heating platen comprising a heating coil or steam coil square or round section which is given a number of U-L bends placed in a horizontal plate overhung being welded thereto a horizontal square bar-support tangentially at the U-bends wherein two cover plates made of high emissivity material are fastened at the top and bottom of the said tube and said cover plates being filled with aluminium foils to promote heat conduction and uniform temperature.

CLASS 205-B, 205-H.

131120

## A METHOD OF, AND AN APPARATUS FOR, APPLYING TREAD MATERIAL TO A TYRE OR WHEEL, AND A TYRE OR WHEEL SO OBTAINED.

JOHN HAROLD BARWELL, 13 CRANMER ROAD, CAMBRIDGE, CAMBRIDGESHIRE, ENGLAND.

Application No. 131120 filed April 26, 1971.

Convention date May 7, 1970 (22154/70) U.K.

28 Claims

A method of applying a tread material comprising of rubber or plastics on an underlay consisting of a carcass or a wheel body for producing a pneumatic or solid rubber tyre comprising extruding tread material under pressure directly on to the underlay with a profile corresponding to the required tread profile to bond the tread material to the underlay.

CLASS 32-A-2, 32-C-1

131171

## PROCESS FOR THE DYEING AND PRINTING OF MOULDED ARTICLES.

BAYER AKTIENGESSELLSCHAFT, FORMERLY KNOWN AS FARBENFABRIKEN BAYER AKTIENGESellschaft, OF LEVERKUSEN, FEDERAL REPUBLIC OF GERMANY.

Application No. 131171 filed April 28, 1971.

4 Claims

Process for the dyeing and printing of moulded articles consisting of polymers of acrylonitrile, copolymers of acrylonitrile, acid-modified aromatic polyesters or polyamides, characterised by applying to said articles an azo dyestuff which is free from acidic water-solubilising groups and which corresponds to the general formula I of the accompanying drawings in which

D and E each denote an aromatic carbocyclic radical;  $r_1$  represents hydrogen, an alkyl radical or an alkenyl radical;  $r_2$ , an alkylene radical;  $r_3$ , hydrogen, an alkenyl, alkyl, cycloalkyl or aralkyl radical;  $r_4$ , hydrogen, an alkenyl radical or an alkyl radical;  $r_5$ , hydrogen, halogen, nitro, cyano, an alkyl radical or an alkoxy radical,  $r_6$ , hydrogen, halogen, nitro, cyano, an alkyl radical, an alkoxy radical,  $NH-CO$ -alkyl,  $NH-SO_2$ -alkyl, aryloxy, aralkoxy,  $-SO_2$ -alkyl,  $-SO_2$ -aryl, or  $-CO$ -alkyl, and X an anion with the proviso that  $R_6$ ,

cannot be alkoxy at the same time as  $R_{1n}$  is  $\text{NH-SO}_2$ -alkyl, and that when both D and E stand for phenyl radicals, E is not substituted by a trifluoromethyl radical or an optionally alkyl or alkoxy substituted benzoyl or phenylsulphonyl radical.

CLASS 4-A-5. 131239

# ARRANGEMENT FOR DEPLOYING AND SPREADING A PARACHUTE.

STENCEL AERO ENGINEERING CORPORATION OF MUNICIPAL AIRPORT ROAD ARDEN, NORTH CAROLINA, UNITED STATES OF AMERICA.

Application No. 131239 filed May 5, 1971.

5 Claims.

An arrangement for initially reefing and subsequently spreading the canopy of a parachute, such arrangement being characterized by the combination of a main parachute including suspension lines and a main canopy, a pilot parachute connected to the apex of the main canopy to aerodynamically deploy the main canopy into the air stream in a downstream direction, and a ballistic device which reefs the main canopy until the main parachute suspension lines are substantially fully stretched whereupon the ballistic device operates to ballistically spread the main canopy.

CLASS 33H. 131499

# DEVICE FOR SHROUDING A STREAM OF METAL TEEMED THROUGH A SLIDABLE GATE

USS ENGINEERS AND CONSULTANTS, INC., 525 WILLIAM PENN PLACE, PITTSBURGH, STATE OF PENNSYLVANIA, UNITED STATES OF AMERICA.

Application No. 131499 filed May 26, 1971.

6 Claims.

A shrouding device protecting a stream of metal from the atmosphere by a shroud of inert gas, the stream being discharged from a nozzle in a bottom-pour vessel and freely falling into the open top of a mould spaced below the nozzle, said shrouding device comprising a sleeve supported by a mounting secured to the vessel bottom and having a cross sectional area providing space for inert gas shrouding the metal stream, an enclosure at the top of the mould having means providing an opening in slidable sealing engagement with the sleeve and an inlet for inert gas, and a gap provided in the mounting of the sleeve for escape of gases shrouding the metal stream.

CLASS-70C4 & 6 131502

# REFERENCE SAMPLES SUITABLE FOR USE IN A METHOD OF DETERMINING NON-DESTRUCTIVELY A COMPONENT OF A METALLIC MATERIAL.

MITSUBISHI JUKOGYO KABUSHIKI KAISHA, OF 5-1, MARUNOUCHI 2-CHOME, CHIYODA-KU, TOKYO, JAPAN.

Application No. 131502 filed May 26, 1971.

3 Claims.

A reference sample suitable for use in a method of determining non-destructively a component of a metallic material which comprises a substance which is capable of bearing water and which is impregnated with salts of two or more different metals such as herein described the metals being present in such amounts that on being subjected to an electrolysis in which the anode is contacted with a metal which is insoluble under the condition of the electrolysis, there is developed a colour which corresponds to a colour developed when a metallic material of known composition is subjected to an electrolysis process in which an anode is contacted with a metallic material, a cathode is contacted with the metallic material through a water-bearing substance which is impregnated with an electrolyte solution which is capable of dissolving the metallic material, the cathode being a material which is subject to little or no corrosion by the electrolyte solution, and a predetermined number of coulombs of electricity are passed whereby a colour of a compound of a metal present in the metallic material is developed on the water-bearing substance

CLASS 32-F<sub>9</sub>-d. 131552

# PROCFSS FOR THE MANUFACTURE OF ACYL ACETIC ACID ARYL AMIDES

FARBWERKE HOECHST AKTIENGESSELLSCHAFT VORMALS MEISTER LUCIUS & BRUNING, OF 45, BRUNINGSTRASSE, FRANKFURT/MAIN FEDERAL REPUBLIC OF GERMANY.

Application No. 131552 Filed May 31, 1971.

5 Claims—No drawings.

A process for the manufacture of acyl acetic acid aryl amides by the reaction of acyl acetic acid alkyl esters with aryl amines in an organic solvent or diluent as herein defined characterized in that the acyl acetic acid aryl amide is separated by filtration after the reaction and the mother liquor is subjected to after condensation by heating at reflux temperature and additional yield of acyl acetic acid aryl amidst aer recovered as before

CLASS 173-B. 131574

# AN AEROSOL DISPENSER

CIBA-GEIGY AG, OF 141 KLYBECKSTRASSE, BASLE, SWITZERLAND.

Application No. 131574 filed June 3, 1971.

21 Claims

An aerosol dispenser comprising (a) a product container having at least one compartment housing a product to be sprayed and bearing axial product outlet means, (b) a detachably mounted aerosol propellant cartridge containing an at least partially liquefied gas under pressure and having propellant outlet means directed toward and generally aligned with the product outlet means, and disposed above the latter during operation of the dispenser, (c) a coupler-aspirator unit disposed between and connecting the product outlet means and the propellant outlet means, the coupler aspirator unit comprising a product aspirating and discharging nozzle for spraying product from said container, each of the product outlet means and propellant outlet means comprising a valve for controlling the flow of product and propellant, respectively, through the respective outlet means, the coupler-aspirator unit being connected at opposite faces thereof to the two valves and having in its interior separate passages leading from each of the valves to the discharge nozzle (d) and guide means holding the product container and the propellant cartridge in generally aligned relationship displaceably relative to each other and to the coupling unit against the pressure of at least one return spring means, the arrangement being such that displacement of the propellant cartridge relative and the product container relative to each other and to the coupling unit causes the valves to open for the flow of product and propellant there through and through the respective passages in the coupler aspirator unit to the discharge nozzle, propellant flowing through the nozzle producing a reduced pressure in the product container and thereby aspirating product to be sprayed into the nozzle.

CLASS 63-B. 131604  
METHOD OF MANUFACTURING MAGNET CORES CONSISTING OF A SOFT-MAGNETIC FERRITE AND MAGNET CORES MANUFACTURED BY THIS METHOD.  
N. V. PHILIPS GLOFLAMPENFABRIEKEN, EMMA-SINGEL 29, EINDHOVEN (HOLLAND)

Application No. 131604 filed June 4, 1971.

7 Claims.—No drawings

A method of manufacturing a magnet core consisting of a soft-magnetic ferrite characterized in that a finely divided starting mixture of iron oxide,  $\text{Fe}_2\text{O}_3$ , copper oxide  $\text{CuO}$ , lithium oxide,  $\text{Li}_2\text{O}$ , zinc oxide,  $\text{ZnO}$  and possibly, cobalt oxide,  $\text{CoO}$ , having a composition expressed in molecular percentages of the metal oxides, in which the lithium is supposed to be present exclusively as a component of a bivalent complex oxide of a composition according to the formula  $(\text{Li}_{0.5} + \text{Fe}^{3+}_{0.5})\text{O}$ , and in which the iron which would be required for the formation of said bivalent complex oxide is not included in the notation of the quantity of iron, expressed in molecular percentages  $\text{Fe}_2\text{O}_3$ , which starting mixture has a composition defined in this manner of

45.0—52.5 mol % of  $\text{Fe}_2\text{O}_3$ ,

5—20 mol % of  $\text{CuO}$ ,

0—5 mol % of  $\text{CoO}$ ,

remainder  $(\text{Li}_{0.5} + \text{Fe}^{3+}_{0.5})\text{O}$  and  $\text{ZnO}$



in a ratio varying from 0.25 : 1 to 1.5 : 1, is compressed in the form of the magnet core to be manufactured, after which the formed compressed product is sintered in air and oxygen at a temperature which does not exceed 1100°C.

CLASS 205-H.

131691

# IMPROVEMENTS IN OR RELATING TO TYRE AND WHEEL ASSEMBLIES

DUNLOP HOLDINGS LIMITED OF DUNLOP HOUSE, RYDER STREET, ST. JAMES'S LONDON S. W. 1, ENGLAND

Application No. 131691 filed June 14, 1971.  
Convention date June 20, 1970 (3007/70) U.K.

24 Claims.

A pneumatic tyre and wheel assembly comprising an enclosing mean, for a lubricating material for the interior surface of the tyre, said lubricating material being releasable from the enclosing means into the inflation chamber defined by the tyre and wheel upon substantially loss of inflation pressure or deflation of the tyre.

CLASS 205-H

131692

# IMPROVEMENTS IN OR RELATING TO PNEUMATIC TYRES.

DUNLOP HOLDINGS LIMITED, OF DUNLOP HOUSE, RYDER STREET, ST. JAMES'S, LONDON S. W. 1, ENGLAND

Application No. 131692 filed June 14, 1971.  
Convention date June 20, 1970 (30030/70) U.K.

12 Claims.

A pneumatic tyre having in the outer region of each of the sidewalls an annular layer of soft rubber applied to the rubber of the sidewall, said soft rubber having a hardness of 45 B.S.I. or softer

CLASS 205-H.

131693

# IMPROVEMENTS IN OR RELATING TO PNEUMATIC TYRES.

DUNLOP HOLDINGS LIMITED, OF DUNLOP HOUSE, RYDER STREET, ST. JAMES'S, LONDON S. W. 1, ENGLAND

Application No. 131693 filed June 14, 1971.  
Convention date June 20, 1970 (30031/70), U.K.

14 Claims.

A pneumatic tyre comprising a reinforced carcass, having beads and sidewalls, and a tread portion having a substantially flat ground contacting surface, said tyre having in the region of each of the sidewalls adjacent to the tread on the outside of the sidewall an annular layer of rubber in addition to the rubber of the sidewall, the layer of rubber having a transverse cross-section of substantially triangular form, the width of the triangle base being between 5 and 12 times the maximum height to the apex of the triangle, the base of the triangle being disposed nearest to the carcass reinforcement of the annular layer

CLASS 61-G, 61-H.

131779

# INSTALLATION FOR CONTINUOUS TREATMENT WITH A HOT FLUID OF PRODUCTS IN THE FORM OF SHEETS, BANDS STRIPS, THREADS, FILAMENTS OR PRODUCTS IN POWDERED FORM.

SUPERBA, 13 RUE DE PFASTALT MUI HOUSE, HAUT-RHIN, FRANCE

Application No. 131779 filed June 18, 1971.

3 Claims.

Installation for the continuous treatment with a hot fluid of products in the form of sheets, bands, strips, threads, filaments or products in powdered form, through a fluid tight enclosure containing steam maintained at a pressure different

from atmospheric pressure, said enclosure having an inlet opening and an outlet opening for the product in communication, through an intermediate compartment, with a secondary chamber through which the product is also passed, characterized in that each intermediate compartment has heatinsulated walls and is provided with heating elements adjustable to a temperature sufficiently high to prevent any condensation of the steam likely to leak from the main chamber into the intermediate compartment through the aforesaid openings.

CLASS 108-B-2(a).

131859

# METHOD AND APPARATUS FOR OPERATING A BLAST-FURNACE WITH AN AUXILIARY REDUCING GAS.

NIPPON KOKAN KABUSHIKI KAISHA, OF 1-3, 1 CHOME, OTEMACHI, CHIYODA KU, TOKYO, JAPAN.

Application No. 131859 filed June 23, 1971.

12 Claims

In a method of reducing iron ore in a blast-furnace the step of operating a blast-furnace with an auxiliary reducing gas which is blown into the stack of the blast-furnace through the wall above the softening or melting zone of the furnace independently or the furnace blast, wherein a gas for recycling and regenerating to form said auxiliary gas is removed from near the top of the furnace stack at a higher temperature and/or with a higher content of reducing constituents (CO+H<sub>2</sub>) and constituents to be regenerated (CO<sub>2</sub>+H<sub>2</sub>O) than the gas that is not to be recycled.

CLASS 152-E, and 145B

131953

# METHOD OF MANUFACTURING AN ARTIFICIAL PAPER.

UCB S. A., OF 4, CHAUSSEE DE CHARLEROI, SAINT-GILLES-LEZ-BRUXELLES, BELGIUM.

Application No. 131953 filed July 1, 1971.

24 Claims—No drawings

A process for the manufacture of artificial paper requiring neither calendering nor biorientation, which comprises homogenizing in a conventional rotary mixer a composition containing: -30 to 94.8% by weight of at least one rigid polyolefin (A) selected from the group consisting of homopolymers and copolymers of ethylene, propylene, and butylene, and also mixtures thereof, and having a melt index of at most 1 decigramme per minute; -0.1 to 35% by weight of at least one polymer (B) which is incompatible with the rigid polyolefin (A) and which when extruded by itself produces a brittle film which has a melt index lower than 10 decigrammes per minute the polymer (B) being selected from the group consisting of homopolymers and copolymers containing a preponderant amount of an ethylenically unsaturated polymerizable monomer having a terminal vinylidene group  $\text{CH}_2=\text{C}<$ , selected from the group consisting of styrene, styrene halo- or alkyl-substituted on the lateral chain or on the nucleus, vinyl chloride, vinylidene chloride, acrylic acid esters and methacrylic acid esters of alkanols containing 1 to 3 carbon atoms; -0.1 to 35% by weight of a macromolecular material (C) producing compatibility between (A) and (B), selected from the group consisting of: (1) copolymers containing at least one monomer selected from the group consisting of ethylene, propylene, and butylene, and at least one monomer selected from the group consisting of isobutylene, butadiene, and isoprene, and (2) a mixture of at least one homopolymer of ethylene, propylene or butylene, and at least one homopolymer of isobutylene, butadiene or isoprene; said macromolecular material having a melt index of at most 2 dg/min. -5 to 45% by weight of an inorganic filler (D) having a granulometry lower than 50 microns; -0 to 10% by weight of adjuvants (E) selected from the group consisting of anti-oxidizing agents, thermal stabilizers, optical bleaching agents, Agents coloring materials, antistatic agents, and lubricants, the mixture thus homogenized is subjected to extrusion to obtain an artificial paper, and the artificial paper thus obtained, if desired, being subjected to surface treatment.



CLASS 32-F<sub>1</sub>, 32-F<sub>2</sub>a.

132123

1 Claim

## PROCESS FOR THE ACYLATION OF 2-AMINO BENZOPHENONE DERIVATIVES.

RICHTER GEDEON VEGYESZETI GYAR R.T., OF 21, GYOMROI UT, BUDAPEST X, HUNGARY.

Application No. 132123 filed July 14, 1971.

## 1 Claim

A process for preparing N-acylated 2-aminobenzophenone derivatives of the general formula I shown in the accompanying drawings wherein R represents a hydrogen atom or an alkyl group having 1 to 5 carbon atoms, X represents a hydrogen atom, a halogen atom, a nitro group or a trifluoromethyl group, Y represents a protecting group such as carbobenzyloxy and tert. butoxy carbonyl groups which can be removed by means of acid treatment and/or hydrogenation. R represents a hydrogen atom or a group occurring in natural alpha-amino acids as side chain, attached to the alpha-carbon atom, which comprises preparing a protected amino acid chloride of the general formula III shown in the drawings, wherein Y and R' have the same meaning as above, by reacting the corresponding protected amino acid with phosphorous pentachloride and adding to this reaction mixture a benzophenone derivative of the general formula II shown in the drawings, wherein X and R have the same meaning as above, and performing the acylation reaction in the absence of acid binding agents.

CLASS 69 E, G and I., 107(F).

132172

## IGNITION DISTRIBUTORS.

JOSEPH LUCAS (INDUSTRIES) LIMITED, OF GREAT KING STREET, BIRMINGHAM, 19, ENGLAND.

Application No. 132172 filed July, 20, 1971.

Convention date July 23, 1970 (35694/70) U.K.

## 5 Claims

An ignition distributor for a road vehicle, including a hollow casing formed internally with a support surface a contact breaker assembly base plate engaged with said support surface a rotatable clamping device constituting a cant members and means rotatably mounting the clamping device on the base plate, the clamping device including an inclined surface engaging the casing, whereby rotation of the clamping device relative to the base plate and the casing cause the device to clamp the base plate on said support surface.

CLASS 5A

132231

## ROTARY HARROWS.

C. VAN DER LELY N. V., OF 10, WEVERSKADE, MAASLAND, THE NETHERLANDS.

Application No. 132231 filed July 24, 1971.

## 51 Claims

A rotary harrow comprising a frame and a plurality of tined soil working members that are arranged in the frame in a row that extends transverse to the intended direction of operative travel of the harrow each soil working member being rotatable about a corresponding upright axis by rotary power derived from a tractor or other operating vehicle to which the harrow is connected in the use thereof, characterised in that the perpendicular distance between the axes of rotation of neighbouring tined soil working members preferably is substantially 25 centimetres and is less than the width of the strip of soil worked by the free end or tip of a tine of each soil working member during rotation thereof, and in that each tine includes a soil working portion that extends upwards from the free end or tip thereof and whose longitudinal axis is inclined to the vertical during use of the harrow, at least part of the length of each such soil working portion being of increasing cross-sectional area from bottom to top.

CLASS 35-D.

132237

## METHOD OF MAKING GYPSUM PLASTER RETARDER

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJ MARG, NEW DELHI-1, INDIA.

Application No. 132237 filed July 26, 1971.  
2-157GI/73

A process of producing a substantially nonhygroscopic and stable organic retarder for controlling the setting time of gypsum plaster which comprises hydrolysing about 10 kg of horns and hoofs of cattle with water under a steam pressure of 3 kg per sq. cm. with 250 g of an alkali metal hydroxide in the presence of 3 kg of an alkaline earth metal hydroxide for about an hour after which the pressure is released and the material is dried and ground.

CLASS 131B<sub>2</sub>

132252

## IMPROVEMENTS IN PERCUSSION DRILL RODS.

SANDVIKENS JERNVERKS AKTIEBOLAG, OF FACK, S-811 01, SANDVIKEN 1, SWEDEN.

Application No. 132252 filed July 26, 1971.

Convention date April 15, 1971 (27710/71) Australia.

## 17 Claims

A threaded joint for percussion drill rods comprising a rod thread and a sleeve thread, the joint having one start and both the rod thread and the sleeve thread having in longitudinal section straight or somewhat curved roots and crests, both threads being cylindrical and having flanks that along their whole abutting portion are straight and join into the substantially straight roots and crest through curved portions, the flanks that abut against each other being inclined at an angle of 25° to 40° to the drill axis and the pitch angle of the thread being 6.5° to 9°.

CLASS 32-F-2(c).

132293

## PROCESS FOR THE PREPARATION OF 4-OXOCAPRONITRILE.

STAMICARBON N. V., OF VAN DER MEASSEN-TRAAT 2, HEERLEN, THE NETHERLANDS.

Application No. 132293 filed July 29, 1971.

## 9 Claims—No drawings

A process for the preparation of 4-oxocapronitrile comprising reacting acrylonitrile with acetone in a liquid medium in the presence of an acid or an acidic compound, in the presence of a catalyst comprising a Schiff base having a boiling point below 150°C and derived from acetone and an aliphatic primary amine or a mixture of said Schiff base and the amine derived therefrom, and that the reaction is carried out with at least 3 moles of acetone per mole of acrylonitrile.

CLASS 103.

132398

## CORROSION INHIBITING COMPOSITION.

CHIEF SCIENTIST, RESEARCH AND DEVELOPMENT ORGANISATION, MINISTRY OF DEFENCE, GOVT. OF INDIA, NEW DELHI (INDIA).

Application No. 132398 filed August 5, 1971.

## 3 Claims

Corrosion inhibiting composition comprising a light viscosity mineral oil fortified with polar corrosion inhibitor selected from alkaline earth betasulphonates such as barium, calcium, magnesium and strontium sulphonates and calcium soap of higher fatty acids such as calcium oleate, calcium palmitate and calcium stearate.

CLASS 103

132400

## INHIBITOR COMPOSITION.

THE CHIEF SCIENTIST, RESEARCH AND DEVELOPMENT ORGANISATION, MINISTRY OF DEFENCE, GOVERNMENT OF INDIA, NEW DELHI (INDIA).

Application No. 132400 filed August 5, 1971.

## 2 Claims—No drawings

An inhibitor composition for preventing staining/tarnishing of cast iron rings/components comprising a cutting oil emulsion and a mixture of inorganic nitrite and alkali silicate and wherein for each part of inorganic nitrite 1 to 30 parts of alkali silicate is used.

CLASS 32C, 55E-4.

132491

## PROCESS FOR THE PREPARATION OF THE ANTIBIOTIC MYC 8003.

KONINKLIJKE NEDERLANDSCHE GIST-EN SPIRITU-SFABRIEK N.V., 1, WATERIN-GSEWEG, DELFT, HOLLAND.

Application No. 132491 filed August 13, 1971.

Convention date August 14, 1970 (39367/70) U.K.

## 11 Claims

Process for the preparation of the antibiotic herein designated MYC 8003, a solid yellow, salt-forming weak acid containing the elements carbon, hydrogen, nitrogen and oxygen, with an optical rotation  $[\alpha]_D^{25}$  of  $-60^\circ$  (1% methanolic solution), poorly soluble in carbon tetrachloride and benzene, soluble in chloroform, methyl isobutyl ketone, butyl acetate, ethyl acetate, methanol and alkaline solutions, gives a slightly positive reaction in the aromate test, forms a red colour with concentrated sulphuric acid, a dark brown colour in the Pauly reaction, a dark red colour and turbidity with ferric chloride, and a precipitate with bromine water, gives a gas production at  $135^\circ\text{C}$ . and further gas production at about  $152^\circ\text{C}$ . and decomposes at  $164-174^\circ\text{C}$ ., shows in the ultraviolet region of the spectrum absorption maxima at 233, 276, 286 and 327 nm., and in the infrared region absorption bands at 810, 860, 940, 980, 1090, 1215, 1355, 1455, 1540, 1650, 2930, 2970, and  $3400\text{ cm}^{-1}$ , which comprises aerobically cultivating the microorganism *Streptomyces ramocissimus* (C.B.S. 190.69), or antibiotic-producing mutant thereof, in an aqueous nutrient medium containing assimilable sources of carbon, nitrogen and inorganic substances, and separating by methods known per se the antibiotic formed during the cultivation.

CLASS 145-F, 172 CG and F. 132614

## PRODUCTION OF PAPER TWINE.

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJI MARG, NEW DELHI-1, INDIA.

Application No. 132614, filed August 23, 1971.

## 2 Claims. No drawings.

A process for the production of twine from papers wherein an aqueous solution of either polyvinyl alcohol and glycerine or glue and glycerine with or without a water soluble direct dye is used for surface treatment of paper before making twine. CLASS 32-F-2(b). 134266

PROCESS FOR THE PREPARATION OF  $\beta$ -PYRIDYL CARBINOL NICOTINOYL GLYCINATE.

SOCIETE D'ETUDES DE PRODUITS CHIMIQUES, OF 16, RUE KLEBER 92-LES-MOULINEAUX, FRANCE.

Application No. 134266 filed January 13, 1972.

## 2 Claims.

A process for the preparation of  $\beta$ -pyridyl carbinol nicotinoyl glycinate which comprises reacting nicotinuric acid on nicotinic alcohol in the presence of sulfuric acid at a temperature comprised between  $70$  and  $150^\circ\text{C}$ .

CLASS 113-B, 85-J. 132690

## A LIGHTER FOR OIL FURNACES.

HEAD OF THE DEPARTMENT OF SPACE ENGINEERING AND ROCKETRY, BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI, BIHAR (INDIA).

Application No. 132696 filed August 28, 1971

## 1 Claim

A lighter for oil furnaces consisting of a ignition material wrapped in Wax paper tubes characterized in that the ignition material comprises.

Ammonium perchlorate (AP) = 70 by wt.  
Polyvinyl chloride (PVC) = 15 by wt.  
Dibutyl phthalate (DBP) = 15 by wt.

Carbon black = 0.1 gm/100 gm. mix.

Copper chromite = 3.0 gm/100 gm. mix.

CLASS 141-C. 132867

## IMPROVED PROCESS OF REDUCING MINERAL ORES.

ALLIS-CHALMERS CORPORATION, OF 1126 SOUTH 70TH STREET, WEST ALLIS 14, WISCONSIN, UNITED STATES OF AMERICA.

Application No. 132867 filed September 10, 1971.

## 6 Claims

A process of reducing metallic oxide and sulfide ores to a lower state of oxidation in a generally horizontal rotary kiln having at least a zone thereof provided with ports spaced around the circumference of the kiln and opening into the interior of the kiln, characterized by the steps of: (a) charging the ported zone with a gas-pervious bed of porous masses of mineral ore, mineral ore being the oxide and sulfide ores of iron, tungsten, nickel, zinc, copper, manganese, chrome, or phosphorus; (b) heating the gas-pervious bed of mineral ore to a temperature of at least  $1800^\circ\text{F}$ ; (c) rotating the kiln about a central axis there through to move the ports therein around the central axis to pass beneath and over the gas-pervious bed; (d) admitting oxidizing gas through the ports into the ported zone only while the ports are over the gas-pervious bed to provide an oxidizing atmosphere over the bed; (e) admitting fluid hydrocarbon fuel substantially free of oxidizing gases through the ports only when the ports are beneath the gas-pervious bed; and (f) heating the hydrocarbon fuel by directing it to pass upwardly from the ports and through the gas-pervious bed of mineral ore at said temperature of at least  $1800^\circ\text{F}$ . to provide an initial pyrolytic dissociation of a portion of the fluid hydrocarbon fuel into carbon and hydrogen while in intimate contact with the oxide ore to effect a rapid reduction of at least a portion of the oxide ore to a lower state of oxidation with attendant surface area increasing solid state reorientation of mineral and oxygen molecules providing for continuing reduction of ore and reformation of the fuel by continued pyrolysis of the fuel to provide carbon and hydrogen and combustion of the fuel with oxygen from the ore to provide carbon monoxide, thereby to provide quantities of carbon, hydrogen and carbon monoxide in intimate contact with mineral molecules in the oxidic mineral ore, for rapidly pre-reducing the oxidic mineral ore to metallic form without a liquid phase.

CLASS 144-E-4. 133228

## PROCESS FOR PREPARING PIGMENTED SOLID PARTICLES OF FILM-FORMING POLYMER.

IMPERIAL CHEMICAL INDUSTRIES LIMITED, OF IMPERIAL CHEMICAL HOUSE, MILBANK, LONDON, S. W 1., ENGLAND.

Application No. 133228 filed October 14, 1971.

Convention date October 21, 1970 (49969/70) U.K.

## 15 Claims—No drawings

A process of preparing pigmented solid particles of film-forming polymer which comprises the steps: (a) emulsifying the film-forming polymer (such as herein described) as a liquid disperse phase in a volatile liquid (such as herein defined) continuous phase which contains dissolved therein a polymeric emulsifying agent containing in its molecule at least one chain-like component of a type which is soluble in the film-forming polymer and at least one chain-like component of another type which is soluble in the volatile liquid continuous phase, the average molecular weight of the individual components being at least 1000, the total molecular weight of the individual components of each type being at least 3000 or at least  $n \times 1000$  whichever is the greater where  $n$  is the number of individual components soluble in the liquid continuous phase and the ratio of the total molecular weights of the individual components of the two types is from 3:1 to 1:3, and (b) blending with the film-forming polymer a pigment (such as herein described) which is optionally dispersed in a volatile liquid (such as herein defined) the liquid being both miscible with the volatile liquid continuous

phase of the emulsion described in (a) and a non-solvent for the film-forming polymer, the steps (a) and (b) being taken in either order, and then (c) volatilising the volatile liquid from a blend of dispersed polymer and pigment to produce pigmented solid particles of polymer.

CLASS 60-C.

133335

## LOCKING DEVICE FOR THE HELMET.

GAYE CURSETJEE, NO-1, MUSEUM ROAD, BANGALORE-1, MYSORE STATE, INDIA.

Application No. 133335, filed October 23, 1971.

## 4 Claims

A locking device for the Helmet comprising of a hole and cable or chain or rod or loops and a lock, by means of which a Helmet can be locked to any item.

CLASS 40-B, 32-E.

133555

## PROCESS FOR THE PRODUCTION OF POLYMERS BY THE CATIONIC POLYMERISATION OF POLYMERISABLE MONOMERS.

SNAM PROGETTI S.p.A., OF 16 CORSO VENEZIA, MILAN, ITALY.

Application No. 133555 filed November 9, 1971.

## 17 Claims

A process for the production of a polymer by the cationic polymerisation of at least one polymerisable monomer and the subsequent recovery of the resulting polymer, characterised in that the monomer(s) in the liquid phase at a temperature in the range from  $+30$  to  $-100^{\circ}\text{C}$ , contact(s) a catalyst comprising (a) an aluminium compound having the formula  $\text{AlR}_2\text{X}$ , wherein both radicals R are hydrogen atoms, both are alkyl hydrocarbon radicals having up to 8 carbon atoms which can be the same or different, or both are aryl hydrocarbon radicals having up to 8 carbon atoms which can be the same or different, and X is a hydrogen atom, a hydrocarbon radical having up to 8 carbon atoms, or a halide atom selected from fluorine, chlorine, bromine and iodine; and (b) a compound capable of yielding positive halide ions, the catalyst being kept in the liquid phase.

CLASS 107-F.

133763

## AN IMPROVED ELECTRICAL APPARATUS SUCH AS IGNITION DISTRIBUTORS AND IGNITION COILS FOR ROAD VEHICLES.

JOSEPH LUCAS (INDUSTRIES) LIMITED, OF GREAT KING STREET, BIRMINGHAM 19, ENGLAND.

Application No. 133763 filed November 26, 1971.

Convention date December 3, 1970 (57431/70) U.K.

## 5 Claims

Electrical apparatus of the kind specified wherein the flexible insulating sheath is formed from a mouldable synthetic resin material which does not contain a halogen.

CLASS 70-C4.

133772

## PRODUCTION OF ALUMINIUM BY ELECTROLYSIS. SWISS ALUMINIUM LTD., OF CHIPPIS (CANTON OF VALAIS), SWITZERLAND.

Application No. 133772 filed November 27, 1971.

## 1 Claim

A method of operating an electrolytic cell for the production of aluminium in a molten fluoride bath with pre-baked anodes, comprising maintaining an inter-polar distance of 5 to 6 cms., an aluminium oxide covering of 14 to 16 cms thickness on substantially all the encrusted surface of the bath, and an anode current density such that as much heat is produced in the cell as the cell can carry away as losses, after deduction of the amounts of heat employed in the decomposition of the aluminium oxide and the heating of the raw material, while the electrolyte temperature lies between  $940$  and  $975^{\circ}\text{C}$ .

CLASS 32-F<sub>1</sub>, 32-F<sub>2</sub>a.

134032

## PROCESS FOR THE PREPARATION OF BENZAMIDE DERIVATIVES.

SOCIETE DETUDES SCIENTIFIQUES ET INDUSTRIELLES DE L'ILE-DE-FRANCE, OF 46, Bd. DE LATOUR-MAUBOURG, 75-PARIS 7, FRANCE, AND TEIKOKU CHEMICAL INDUSTRY CO. LTD., OF NO. 1-10, KITA HORIE KAMIDORI, NISHI-KU, OSAKA, JAPAN.

Application No. 134032 filed December 21, 1971.

## 1 Claim

A process for the preparation of 4-amino-2, 5-substituted-N, N-(dialkyl-alkylenediamine) benzamides, of the formula shown in Fig. 1 of the accompanying drawings and salts thereof which comprises reacting N, N-dialkyl alkylenediamine with phosphorus oxychloride and then the resulting N, N-dialkylaminoalkylenephosphoramidate of the formula shown in Fig. 4 of the drawings wherein A is a lower alkylene group, R<sub>1</sub> and R<sub>2</sub> are, the same or different, a lower alkyl group or its salt with 4-amino-2, 5-substituted benzoic acid of the formula shown in Fig. 5 of the drawings wherein X is a halogen atom or hydrogen atom, R<sub>3</sub> is hydrogen atom, hydroxyl group or an alkoxy group.

CLASS 6-B-4, 129-E, G, J, Q.

134096

## A PRESSURE VESSEL AND A METHOD OF MANUFACTURING THE SAME.

SNAM PROGETTI S. P. A., 16 CORSO VENEZIA, MILAN, ITALY.

Application No. 134096 filed December 28, 1971.

## 17 Claims.—No drawings.

A pressure vessel comprising an internal shell or a plurality of superimposed internal shells formed of a metallic material and, over the internal shell(s), at least one external shell formed of a metallic material having a yield point and a creep resistance higher than those of the internal shell, the external shell(s) not being welded with to the internal shell or outermost internal shell, or circumferentially to each other, the external shell(s) completely covering the outward-facing surface of the internal shell(s), and the external shell(s) (when a plurality is present) being superimposed.

CLASS 195-C.

134402

## IMPROVEMENTS IN OR RELATING TO MANUALLY OPERATED VALVES.

DEVELOPMENT CONSULTANTS PRIVATE LIMITED, OF 24-B, PART STREET, P.O. PARK STREET, CALCUTTA-16, STATE OF WEST BENGAL, INDIA.

Application No. 134402 filed January 28, 1972.

## 10 Claims

An improved manually operated valve for handling material (as hereinbefore defined) in a piping system, characterised in that the said valve generally in combination, has for its essential parts—(i) a frame; (ii) a valve body having an opening, held by the said frame and on which opening an inlet pipe and an outlet pipe of the piping system are mounted, the said opening corresponding to the passage of the said inlet and outlet pipes; (iii) a slide plate housed in the said valve body and which is adapted to slide to and fro within the valve body, one end of the said slide plate being provided with an opening for the flow of the material therethrough, and the other end of which is connected to a linkage; and (iv) an operating means mounted on the said frame, for effecting to and fro movements of the slide plate, such that the opening of the said slide plate will remain in line with the inlet and the outlet pipes of the piping system for the flow of the material therethrough, when the valve is in the normal open position, but the said opening in the slide plate will be adapted to move away from the said line for effecting complete blocking of the passage of the material through the piping system.

CLASS 67-C.

134823

## PROGRAMMER FOR SUCCESSIVE TIMING OF WORKING CYCLES IN APPARATUS CONTROLLING INDUSTRIAL UNITS.

LENINGRADSKY ORDENA LENINA POLITEKHNI-  
CHESKY INSTITUT IMENI M. I. KALININA, POLI-  
TEKHNIЧЕСКАЯ УЛИЦА 29, Leningrad, USSR,  
AND Leningradsky Ordена Trudovogo Kras-  
nogo Znameni Zavod "ELEKTRIK" IM. N. M.  
SHVERNIKA, ULIЦА AKADEMIKA PAVLOVA 8,  
Leningrad, USSR.

Application No. 134823 filed March 4, 1972.

## 2 Claims

A programmer for successive timing of working cycles in apparatus controlling industrial units, for example resistance welders, the programmer incorporating magnetic cores having rectangular hysteresis loop, diodes and transistors, and comprising a principal decimal counter arranged to count durations of successively timed time intervals, a further decimal counter arranged to count the number of repeated equal time intervals within one repetition cycle, a principal distributor of current control pulses associated with the outputs of said principal and additional decimal counters and having a current pulse shaper, switching units for setting the required durations of successively timed time intervals, said switching units being connected to the respective inputs and outputs of the principal distributor of control pulses, as well as to the respective write inputs of the principal decimal counter, and a switching unit for setting the required number of the repeated equal time intervals, said switching unit being connected to the respective write inputs of the further decimal counter, the programmer of the invention also including a further distributor of control current pulses, incorporating two groups of current pulse shapers, the number of the current pulse shapers comprised in the first of said groups being equal to the number of the successively timed repetition cycles, and the number of the current pulse shapers comprised in the second of said groups being one less than the number of the current pulse shapers comprised in the said first group, the number of the switching units for setting the required number of the repeated time intervals being equal to the number of the successively timed repetition cycles, each of said switching units being made multidigit, the output circuit of each pulse shaper belonging to the second group and a winding used for magnetic preparation of the respective current pulse shaper of the first group being connected in series and inserted between the digits of the respective switching unit for setting the number of repetitions, read windings of the current pulse shapers of the first group being connected in series and inserted into the output circuit of a more significant digit of said further decimal counter, the output circuit of each current pulse shaper of the first group, except the last one, being connected in series with the winding of magnetic preparation of the respective current pulse shaper belonging to the second group, said winding of magnetic preparation being coupled to the input of the principal distributor of control pulses, pulses controlling the continuation of repetition cycles coming thereto, the output circuit of the last current pulse shaper belonging to the first group being connected to the input of the principal distributor of control pulses, pulses controlling the timing of a time interval following the timed repetition cycles arriving thereto.

CLASS 95-I 135252

## DEVICE FOR SEVERING TILES.

OPORTO CERAMICS LIMITED, OF 324 MEANWOOD ROAD, LEEDS, YORKSHIRE, ENGLAND.

Application No. 135252 filed April 12, 1972.

Convention date April 13, 1971 (9202/71) U.K.

## 9 Claims

A device for severing a tile such as a hand tool or a machine, including a pair of co-operative jaws, the upper jaw having a transversely curved groove in its underface positioned centrally between and parallel with its side edges and extending from front to back of the jaw, said jaw face inclining downwardly away from said groove on each side to said side edges, or being convex on each side, and the lower jaw having a shaped upper face or edge to have line engagement with a tile.

CLASS 32-F-2-a, 32-F-2-b, 55-E-4. 135395

## PROCESS FOR PREPARING 4-DESOXYRIFAMYCIN SV.

GRUPPO LEPETIT S.P.A. OF VIA ROBERTO LEPETIT 8, MILAN, ITALY.

Application No. 450/Cal/73 filed February 28, 1973.

Division of Application No. 122581 filed August 1, 1969.

## 1 Claim

A process for preparing a 4-desoxyrifamycin SV of the formula shown in Fig. 1 of the accompanying drawings, wherein + X is a member of the class consisting of  $-\text{CH}_2\text{NB}$  and  $-\text{CH}=\text{NB}$ , in which the group NB is selected from anilino, mono- and di-lower alkylamino, benzylamino, di-lower alkylamino-lower alkylamino, pyrrolidino, piperidino and morpholino, R1 is a member selected from hydrogen and, when X is  $-\text{CH}=\text{NB}$ , a negative charge, which comprises refluxing a 4-desoxy-4-diazorifamycin SV of the formula shown in Fig. 2 of the drawings, with an excess over 3 equimolecular amounts of formaldehyde and an amine of the formula HNB, wherein the groups NB has the above significance, in an organic solvent for 2-12 hours, and optionally treating the obtained 3-aminomethyl derivative of 4-desoxyrifamycin SV with manganese dioxide at room temperature.

CLASS 32-F-2-a, 32-F-2-b, 55-E-4. 135396

## PROCESS FOR PREPARING 4-DESOXYRIFAMYCIN SV.

GRUPPO LEPETIT S. P. A. OF VIA. ROBERTO LEPETIT 8, MILAN, ITALY.

Application No. 451/Cal/73 filed February 28, 1973.

Division of Application No. 122581 filed August 1, 1969.

## 1 Claim

A process for preparing a 4-desoxyrifamycin SV of the formula shown in Fig. 1 of the accompanying drawings, wherein R is selected from phenyl, anilino, di-lower alkylamino and 4-methyl piperazino which comprises refluxing 4-desoxy-4-diazorifamycin S of the formula shown in Fig. 2 of the drawings, with an excess over 3 equimolecular amounts of formaldehyde and an amine of the formula HNB wherein the group NB is selected from the class consisting of anilino, mono- and di-lower alkylamino, benzylamino, di-lower alkylamino-lower alkylamino, pyrrolidino, piperidino and morpholino, in an organic solvent for 2-12 hours, treating the obtained 3-aminomethyl derivative of 4-desoxyrifamycin SV of the formula shown in Fig. 3 of the drawings wherein NB has the meaning given above, with manganese dioxide at room temperature, and contacting the hereby obtained reaction product with a molar excess of a compound  $\text{H}_2\text{NR}$ , in which R has the above significance, at room temperature in an inert solvent.

CLASS 35-E, 85-B, 97-F. 135401

## IMPROVED ROOF CONSTRUCTION OF FURNACE

ORISSA CEMENT LIMITED OF RAJGANGPUR, DIST-SUNDARGARH, ORISSA, INDIA.

Application No. 353/72 filed May 30, 1972.

## 9 Claims

A novel bridge type roof construction of a furnace where lining is done by using refractory bricks without dressing and/or chipping or with minimum dressing and/or chipping and filling the gaps resulting out of the brick assembly with granular refractory mass.

## Opposition Proceedings

### (1)

The opposition entered by Harish Textile Engineers Private Limited to the grant of a patent on application No. 122913 made by Wanson (India) Pvt. Ltd. as notified in Part III, Section 2 of the Gazette of India dated the 5th June 1971 has been successful and the application for the patent refused.

### (2)

The application for patent No. 127391 made by Tatsuo Fukuoka in respect of which an opposition was entered by Swastik Rubber Products Ltd. as notified in Part III, Section 2 of the Gazette of India dated the 25th December 1971, has been treated as abandoned.

**Printed Specification Published**

A limited number of printed copies of the undernoted specifications are available for sale from the Officer-in-Charge, Government of India, Central Book Depot, 8,

Hastings Street, Calcutta, at two rupees per copy :—  
 104228 104381 104468 104493 104507 104536 104547 104560  
 104570 104573 104599 104658 104722 104734 104769 105095  
 105373 105472 105585 105901 105904 105913 105915 105917  
 105927 105928 105948 105968 105972 105992 106003  
 106030 106112 106153 106192 106235 106284 106302 106413  
 106483 106484 106516 106631 106658 106888 106971 107017  
 107136 107137 107398 107646 107657 107674 107676 107744  
 107831 107944 107966 107989 108032 108033 108127 108177  
 108214 108257 108262 108265 108319 108381 108515 108603  
 108607 108716 109355 109431 109789 110010 110077 110264  
 110283 110285 110564 110648 110682 110789 111181 111244  
 111290 111745 112355 112356 112357 112358 112359 113716

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102218 102309 102310 102321 102326 102409 102457 102759  
 102845 102881 102884 102973 103015 103590 103604 103616  
 103638 103640 103641 103673 103696 103705 103707 103709  
 103718 103733 103793 103833 103867 103903 103921 103925  
 103939 103954 104152 104310 104432 104615 104752 104929  
 105020 105091 105500 105583 105635 105848 105870 105878  
 105984 106124 106243 106262 106526 106530 106622 106646  
 106693 106785 106992 107021 107025 107115 107172 107223  
 107225 107353 107513 107532 107884 107986 108516 108629  
 109959 110188 110793.

(3)

95267 95458 96488 96529 96560 96568 96570 96596 96598  
 96605 96610 96625 96641 96648 96672 96737 96738 96814  
 96821 96876 96883 96884 96892 96903 96915 96917 96931  
 96960 96963 97013 97014 97019 97130 97146 97520 97534  
 97607 97645 97674 97703 97771 97811 97817 97841 97872  
 97873 97907 97911 97921 97926 97928 97937 97939 97947  
 97955 87961 97965 97981 97982 97992 97997 97999 98003  
 98009 98039 98051 98053 98054 98058 98062 98078 98083  
 98090 98106 98115 98122 98133 98134 98155 98172 98210  
 98213 98237 98247 98280 98301 98335 98339 98344 98357  
 98473 98475 98495 98514 98604 98653 98689 98727 98831  
 98956 99231 99239 99476 99668 99709 99732 99743 99826  
 100308.

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96260 97486.

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95376 97265 98254 98313.

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97898.

(7)

102477.

**Cessation of Patents**

118148 120833 125857 126114 126500 126501 126951 127289  
 127352 127354 127365 127798 128337 128959 128974 129313  
 129314 130551 130658.

**Amendment Proceedings under Section 57**

(1)

Notice is hereby given that Imperial Chemical Industries Limited, manufacturers, of Imperial Chemical House, Millbank, London, S.W.1., England, a British Company have made an application under Section 57 of the Patents Act, 1970 for amendment of specification of their application for Patent No. 126019 for "catalyst precursor composition, method for producing it, and process of hydrosulphurisation using the catalyst." The amendments are by way of correction and disclaimer so as to ascertain the invention more correctly and clearly. The application for amendment and the proposed amendments can be inspected free of charge at the Patent Office on any working day during usual office hours or copies of the same can be had on payment of usual copying charges. Any person interested in opposing the application for amendment may file a notice of opposition on the prescribed form 30 within three months from the date of this notification. If the written statement of opposition is not filed with the notice of opposition, it shall be left within one month from the date of filing the said notice.

(2)

Notice is hereby given that British Steel Corporation, a British Corporation, incorporated and existing under the Iron and Steel Act, 1967, whose principal officer is at 33 Grosvenor Place, London, S.W.1, England have made an application under Section 57 of the Patents Act, 1970 for amendment of specification of their application for patent No. 128831 for "Alloying steels". The amendments are by way of correction and disclaimer so as to ascertain the invention more correctly and clearly. The application for amendment and the proposed amendments can be inspected free of charge at the Patents Office on any working day during usual office hours or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file a notice of opposition on the prescribed form 30 within three months from the date of this notification. If the written statement of opposition is not filed with the notice of opposition, it shall be left within one month from the date of filing the said notice.

**Patents Deemed to be Endorsed with the Words "Licences of Right"**

The following patents are deemed to have been endorsed with the words "Licences of right" under Section 87 of the Patents Act, 1970. The dates shown in the crescent brackets are the dates of the patents.

No. Title of the invention

- 107096 (17-9-66) Process for purifying organic substances.  
 107143 (20-9-66) Method and plant for drying effluent sludge, for the manufacture of fertilizers.  
 107148 (21-9-66) A process for preparation of an active magnesia for removal of silica from water in the cold.  
 107161 (26-3-65) Process for the manufacture of 1, 4-dithia-anthraquinone-2, 3-dicarboxamide and 1, 4-dithia-anthraquinone-2, 3-dicarboxylic acid amide.  
 107162 (24-9-65) Novel oleophilic graphite and a method of grinding graphite.  
 107163 (21-9-66) Lubricating composition and method for preparing the same.  
 107164 (24-9-65) Oleophilic molybdenum disulphide and a method of preparing the same.  
 107165 (21-9-66) Lubricating compositions, method for the preparation thereof and dispersions containing the same.  
 107214 (27-9-66) Improvements in or relating to thermal cracking process.  
 107221 (27-9-66) Olefins and process for purifying them.  
 107230 (28-9-66) Zeolite regeneration process.  
 107232 (16-10-65) Improvements in or relating to the purification of phenol.  
 107239 (28-9-66) Insecticidal and acaricidal compositions containing substituted carbamate acetamide phosphates and phosphonates.  
 107241 (28-9-66) Production of polycene aldehydes.  
 107242 (28-9-66) Pigment containing lacquers and a process for their manufacture.  
 107269 (29-9-66) Process for the preparation of elastomeric polymers.  
 107274 (30-9-66) Improvements in the production of yeast from hydrocarbons, hydrocarbon products and lipid containing yeasts obtained therewith.  
 107292 (1-10-66) Thermal cracking process with improved decoking.  
 107303 (20-5-66) Process for brightening organic materials.  
 107308 (3-10-66) Process for the preparation of vinyl monomers by the catalytic dehydrogenation of hydrocarbons.

- 107315 (5-11-65) Vulcanizable polymeric compositions and process for the preparation thereof.
- 107319 (3-10-66) Process for preparing new carotenoids having pigmenting action and composition containing the same.
- 107329 (18-4-66) Insecticidal and acaricidal compositions.
- 107332 (4-10-66) Nickel organophosphites, their process of preparation and stabilizer compositions containing the same.
- 107335 (4-10-66) Improved process for the selective hydrogenation of hydrocarbon mixtures.
- 107341 (4-10-66) Novel diketones, process for their preparation and scented compositions containing the same.
- 107365 (5-10-66) A method of manufacturing monocrystalline iron.
- 107373 (5-10-66) Polymerisation catalyst, process for preparing the same and process for polymerisation of cyclic ethers with the said catalyst.
- 107374 (5-10-66) A method of rapid heating of solid metal material in a melting, alloying or refining process and an apparatus therefor.
- 107382 (6-10-66) High density ammonium nitrate prills and method of producing the same.
- 107396 (7-10-66) Herbicidal compositions.
- 107402 (7-10-66) A process for the preparation of catalyst.
- 107408 (9-4-65) Method of preparing metal-free phthalocyanine in X-from and metal free phthalocyanine prepared by the method.
- 107411 (10-10-66) Process for the separation and recirculation of unreacted starting gases in the urea synthesis.
- 107419 (10-10-66) Preparation of oximes.
- 107446 (13-10-65) Preparation of methylene dioxybenzene derivatives.
- 107452 (11-10-66) Improved process for the gaseous state synthesis of chemical compounds, and compounds so produced.
- 107453 (11-10-66) Process for improving the properties of an azo pigment.
- 107475 (12-10-66) A process for separating selected rare earth values from an aqueous solution containing said rare earth values.
- 107476 (12-10-66) A method for selectively separating cerium values from non-cerium values from a material containing rare earths.
- 107477 (12-10-66) Process for the preparation of phosphoric acid esters.
- 107478 (12-10-66) Process for the preparation of phosphoric acid esters.
- 107479 (3-8-66) A process for the production of polymer blends.
- 107481 (12-10-66) A process for sweetening sour hydrocarbon liquids.
- 107482 (21-1-65) Process for the production of novel quaternary compounds and the compounds so produced.
- 107483 (13-10-65) Improvements in and relating to the treatment of pigments.
- 107499 (14-10-66) A process for the production of polymers.
- 107502 (14-10-66) Furnace and process for producing, in fused bath, metals from their oxides, and electrolytic furnaces having multiple cells formed of horizontal bipolar carbon electrodes.

- 107512 (21-10-65) A process for stabilization of polymers.
- 107516 (15-10-66) Halogenation of olefins.

#### Renewal Fees Paid

64603	63652	64743	64985	65546	67638	68118	68119	68120
68257	68350	68415	68425	68464	68487	68545	68562	68593
68693	69301	71181	72334	72439	72508	72531	72604	72609
72627	72694	72863	72890	72906	72910	72969	73055	77476
77515	77532	77566	77594	77661	77676	77677	77678	77736
77895	78426	79418	79420	79983	82416	83061	83148	83154
83155	83232	83292	83295	83372	83412	83618	83683	83777
83802	83816	86226	86254	86255	87669	88563	88698	88761
88760	88820	88885	88928	88949	89003	89150	89294	89403
89638	92703	93912	94134	94351	94624	94657	94710	94732
94760	94761	94903	94904	94997	95026	95065	95243	95260
95279	95400	95798	95933	96156	96157	96446	96534	97247
98065	99819	100330	100404	100416	100468	100469	100492	
100493	100503	100526	100529	100530	100533	100550	100583	
100610	100612	100641	100642	100701	100722	100744	100745	
100752	100753	100846	100880	100910	101193	101245	101323	
101388	101705	101960	101985	102415	102672	102872	103267	
105428	106000	106024	106026	106027	106032	106049	106064	
106068	106112	106139	106153	106164	106174	106176	106224	
106265	106285	106286	106304	106310	106318	106334	106352	
106399	106414	106656	106688	106721	106803	106806	106807	
106965	107101	107159	107206	107637	107659	107725	107773	
107869	108167	110495	110937	111031	111368	111373	111377	
111402	111428	111451	111457	111481	111482	111497	111511	
111513	111515	111544	111545	111575	111586	111596	111600	
111601	111612	111637	111716	111662	111748	111859	111914	
111927	111958	112223	112976	113149	113732	115460	115461	
115462	115464	115710	116254	116348	116590	116595	116622	
116627	116663	116690	116720	116743	116754	116785	116795	
116823	116883	116898	116946	116976	116990	117055	117199	
117226	117233	117347	117350	117354	117356	117404	117435	
117436	117437	117444	118117	118940	119268	121703	121924	
122043	122063	122070	122137	122172	122173	122187	122194	
122195	122197	122210	122212	122222	122231	122244	122246	
122265	122271	122274	122305	122306	122310	122333	122338	
122362	122408	122421	122423	122437	122439	122482	122483	
122562	122563	122564	122565	122579	122644	122645	122761	
122781	122815	122816	122901	123348	123424	123425	123532	
123566	123837	124282	125188	127419	127456	127519	127580	
127739	127761	127822	127863	128410	128870	129498	129620	
130495	131887							

#### Cessation of Patents

74435	77849	107187	109114	109118	109129	109136	109181
109219	109227	109240	109247	109250	109271	109279	109318
109319	109336	109343	109352	109365	109422	109449	109466
109467	109499	109503	109505	109512	109520	109550	109952
109568	109574	109577	109584	109599	109600	109601	109649
109692	109699	109716	109718	109742	109745	109775	109807
109812	109823	109824	109845	109846	109858	109874	109879
109881	109895	109910	109916	109925	109927	109945	110000
110029	110043	110044	110050	110052	110054	110067	110087
110091	110096	110098	110100	110106	110136	110142	110145
110165	110166	110167	110169	110170	110177	110182	110198
110203	140208	110216	110234	110238	110246	110286	110288
110290	110299	110301	110302	110308	110324	110348	110349
110350	110358	110359	112742	116714			

#### Registration of Designs

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in each entry is the date of registration of the design included in the entry.

Class 1. No. 140371. Naba Kumar Routh, an Indian National, 78, Netaji Subhas Road, Calcutta-7, West Bengal, India, "Chapatii", making machine "(Belna machine)", November 9, 1972.

Class 1. No. 140376. Dunlop Limited, a British Company, Fort Dunlop, Erdington, Birmingham, England Dunlop House, Ryder Street, St. James, London S. W. 1, England, "A clamp", May 11, 1972. (U.K.).

Class 1 No. 140378. Gopal Bhikabhai Umrigar, Pas-Products, Bahadoor Manzil, 16-30, Store Lane, Parsi

Bazar Street, Bombay-1, Maharashtra, India, "Latch", November 14, 1972.

Class 1. No. 140413. Arjandas Ghanshyndas Tekawani, Laxmandas Ghanshyandas Tekawani, Jethanand Ghanahymdas Takawani and Bhagavatibai Tikamdas Tekawani, all Indian nationals, Serdarnagar, Ahmedabad-2, (Gujarat State) India, "Container", November 30, 1972.

Class 1. No. 140417. Photonics, a Indian Partnership Registered concern, 10 Station Road, Lucknow, Uttar Pradesh, India, "Dry mounting press" (for mounting photographs)", December 4, 1972.

Class 1. No. 140418. Photonics, a Indian Partnership Registered concern, 10 Station Road, Lucknow, Uttar Pradesh, India, "Peg measure (Liquor dispenser)", December 4, 1972.

Class 1. No. 140421. Abdul Sattar, Mohamed Samiulla Sheriff, Mohamed Khaleelulla Sheriff and, Mohamed Baseerulla Sheriff, 140, Balepet, Bangalore 2, Mysore State, India, Subject of the Indian Republic, "A tank stove", December 7, 1972.

Class 3. No. 140351. Bengal Plastic Industries Private Ltd., an Indian Company duly registered under the Indian Companies Act, having its registered Office :— D-8, Industrial Area, Site No. 3, Meerut Road, Ghaziabad, Uttar Pradesh, "Tumbler", November 3, 1972.

Class 3. No. 140390. Richardson Hindustan Limited, Company registered Under the Companies Act, 1956, having its registered Office at Tiecicon House, Dr. E. Moses Road, Bombay-4, Maharashtra, "Containers", November 18, 1972.

Class 3. No. 140392. Paramount Products a registered Indian, partnership firm carrying on business at Block No. A/28, 2nd floor, Shri Ram Industrial Estate, G. D. Ambekar Road, Bombay-31, Maharashtra (India), "Containers", November 21, 1972.

Class 4. No. 140393. Paramount Products, a registered Indian partnership firm carrying on business at Block No. A/28, 2nd floor, Shri Ram Industrial Estate, G. D. Ambekar Road, Bombay-31, Maharashtra (India), "Containers", November 21, 1972.

Class 4. No. 140431. Mit-N-Mir, (An Indian Registered Partnership Firm) Chandradeep Apartment, Rangildas Mehta Sheri Naka, Gopipura, Surat-2, Gujarat State, India "Concrete outlet", December 11, 1972.

Class 4. No. 140433. Mit-N-Mir, (An Indian Registered Partnership Firm), Chandradeep Apartment, Rangildas Mehta Sheri Naka, Gopipura, Surat-2, Gujarat State, India, "End unit of road bridge", December 11, 1972.

Class 4. No. 140434. Mit-N-Mir, (An Indian Registered Partnership Firm), Chandradeep Apartment, Rangildas Mehta Sheri Naka, Gopipura, Surat-2, Gujarat State, India, "End unit for head regulator", December 11, 1972.

Class 12. No. 140402. Ali Mehtab, D-52, Nai Basti, Seelampur, Delhi-32, Indian National, "Baby mosquito net", November 23, 1972.

#### Copyright Extended for a Second Period of Five Years

Design Nos. 134382 Class—1.

Design Nos. 140237 to 140239, 134770 Class—3.

Design Nos. 134771, 134612, 134613, to 134617, 134950 Class—4.

#### Copyright Extended for a Third Period of Five Years

Design No. 117939 and 117940 Class—1.

#### Cancellation of the registration of Designs (Section 51A)

(1)

The application made by Aggarwal Metal Industries for cancellation of the registration of Design No. 136656 in the name of Asrar Ahmed trading as General Metal Works which was notified in Part III, Section 2 of the Gazette of India dated the 5th December 1970 has been treated as withdrawn.

(2)

The application made by Aggarwal Metal Industries for cancellation of the registration of Design No. 136657 in the name of Asrar Ahmed trading as General Metal Works which was notified in Part III, Section 2 of the Gazette of India dated the 30th October 1970 has been treated as withdrawn.

S. VEDARAMAN

Controller General of Patents, Designs and Trade Marks.



